

Section 972
METHOD OF TEST FOR DETERMINING THE QUANTITY AND RATE OF ABSORPTION OF
ASPHALT PAVEMENT REJUVENATING AGENTS

972.01 Scope

1. This method covers a field absorption test for determining the optimum starting application rate of an asphalt pavement rejuvenating agent.

972.02 Apparatus and Materials

1. 1:1 or 2:1 Rejuvenator Type A, B, B-Mod, C, or D
2. Ring Template, six-inch diameter
3. Marker Crayon
4. Paintbrush, 1 inch wide
5. Graduated Cylinder, 25 mL -Calibrated to Deliver, or a Veterinary Syringe
6. Timer
7. Bio-Act for clean-up

972-03 Procedure

The optimal starting application rate of a rejuvenating agent is determined by observing the rates and absorption characteristics of known quantities of agent placed in a six-inch circle.

1. Do all testing in the pavement wheel-paths
2. Using the ring template, draw several six-inch circles at various locations on the pavement surface.
3. Note the type and dilution rate of the agent being evaluated.

4. Use the graduated cylinder or animal syringe and measure a starting, equivalent amount of agent for a 0.08 gsy (gallons per square yard) application rate using the following table 1.

Table 1- Trial Volumes

gsy	mL/ 6"Circle
0.08	6.6
0.10	8.3
0.12	9.9
0.15	12.4

Note: To compute the trial volume of agent in mL for any application rate in gsy, multiply the given application rate by 82.67. Example: for an application rate of 0.10 gsy, multiply by 82.67 and round to 8.3 mL.

5. Pour into the ring and use the small brush to quickly and uniformly spread it over the area of the circle. Note the time and rate of application.
6. Record the time interval required for the agent to penetrate into the surface.
7. Repeat on the other circles using different application rate.
8. Wait fifteen to twenty minutes on each trial application and visually evaluate the absorption characteristics in each circle.
9. Select and recommend the largest rate of application that is absorbed into the pavement surface in 15 to 20 minutes leaving just a few small wet spots.

972-04 Precautions

1. Limit the application rate to a maximum of 0.25 gsy, regardless of the amount absorbed, on open graded, or very porous pavement surfaces.
2. Perform tests at several locations throughout the proposed project because of varying pavement surface conditions.
3. If the pavement surface appears to have a heavy residue of oil remaining after the 15-minute interval, either too much rejuvenator was used for the test or the pavement is not a candidate for rejuvenation.